# Yifan (Carrie) Chen

(734) 546-5517 | chencarrie154@gmail.com | Redwood City, CA | linkedin.com/in/yifan-chen-carrie

#### Education

Carnegie Mellon University-Silicon Valley

Master of Science in Software Engineering

08/2023 - 12/2024Mountain View, CA

University of Michigan-Ann Arbor

08/2020 - 04/2023

Bachelor of Science, Computer Science | 3.88/4.0 GPA | James B. Angell Scholars

Ann Arbor, MI

## Skills

Languages: Java, Python, C++, SQL, JavaScript, HTML/CSS, Shell

Frameworks and Tools: React, Next.js, Node.js, TypeScript, Vue, Linux, AWS, Google Cloud Platform, Azure, jQuery, Git, MongoDB, Terraform, Kubernetes, REST API, JUnit, Mockito, NumPy, PyTorch, Flask

### Experience

## PlayStation

San Francisco, CA

Software Engineer Intern

05/2024 - 08/2024

- Designed and implemented a Distributed Tracing system with **TypeScript** and **Next.js** for PlayStation's cross-platform web features, providing end-to-end visibility and performance monitoring of the requests.
- Led project planning and steered cross-functional team collaborations, ensuring the tracing architecture was seamlessly adopted across PlayStation's web components.
- Created detailed documentation covering the architecture, technologies used, and integration guidelines.

#### Yext

New York City, NY

Software Engineer Intern

05/2022 - 08/2022

- Contributed as a full-stack software engineer in a dynamic, cross-functional, agile team environment.
- Leveraged Java and React to implement a user activity tracking system as an in-house alternative to Pendo, to support fine-grained analytics and insights into Yext product usage.
- Implemented various features, including pagination and search functions, of the new user login history page, which was released to over 1000 users.
- Made various improvements, including multi-criteria filtering, to the internal admin tool, resulting in improved daily work experience for over 500 employees.

## **Projects**

# **Emergency Social Network**

08/2023 - 12/2023

- Designed and implemented a real-time social network platform for emergencies using **Express.js** with a **microservices** architecture and the **MVC** pattern to ensure scalability and maintainability.
- Leveraged MongoDB and Socket.io to implement key features, including private and group chats, public wall, status updates, resource listings, real-time alerts, and notifications.
- Using the Abstract Factory design pattern, enabled both site-wide search and category-specific search, along with sorting and filtering.

## Taxi Service Management

03/2024 - 04/2024

- Leveraged **Kafka** and **Apache Samza** to process data streams, dynamically updating driver statuses, client profiles, and ride requests, while fulfilling ride requests through real-time match score calculations.
- Deployed the system on an AWS EMR cluster for scalable processing and fault tolerance.
- Implemented a real-time advertising system that matches targeted client profiles with Yelp businesses.

### MapReduce

11/2022 - 12/2022

- Designed and implemented a MapReduce framework inspired by Google's MapReduce paper.
- Implemented a distributed system utilizing system threads, processes, and network sockets.
- Utilized **TCP** for manager-worker task communication and **UDP** for heartbeat monitoring, enabling fault tolerance in the framework.

# Machine Learning on the Cloud

11/2023 - 12/2023

- Utilized Google Vertex AI's elastic scaling to train a ride fare prediction model, and optimized accuracy through automatic hyperparameter tuning.
- Leveraged **Python Flask**, Vertex AI, Cloud Text-to-Speech, Speech-to-Text, Natural Language, and Directions APIs to build an end-to-end application that processes speech queries about car ride fares and provides speech-based responses.